



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/822,544	03/30/2001	Dennis P. Donnelly	456703-1	7667

7590 06/23/2005

DORSEY & WHITNEY LLP
ATTORNEYS AT LAW
801 GRAND, SUITE 3900
DES MOINES, IA 50309

EXAMINER

CARLSON, JEFFREY D

ART UNIT	PAPER NUMBER
----------	--------------

3622

DATE MAILED: 06/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/822,544

Applicant(s)

DONNELLY ET AL.

Examiner

Jeffrey D. Carlson

Art Unit

3622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-62 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-62 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

5 Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-26, 32, 33, 43-56 are rejected under 35 U.S.C. 101 because the claims
10 are not "within the technological arts." The body of the claims should include computer structures or computer-based steps which perform a non-trivial data processing function. Candidates for acceptable "technology" would include the computerized generation, management and redemption of credit features rather than simple input, output or data transmission. See below for further explanation.

15 As an initial matter, the United States Constitution under Art. I, §8, cl. 8 gave Congress the power to "[p]romote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries". In carrying out this power, Congress authorized under 35 U.S.C. §101 a grant of a patent to "[w]hoever invents or discovers any new and useful process,
20 machine, manufacture, or composition or matter, or any new and useful improvement thereof." Therefore, a fundamental premise is that a patent is a statutorily created vehicle for Congress to confer an exclusive right to the inventors for "inventions" that promote the progress of "science and the useful arts". The phrase "technological arts" has been created and used by the courts to offer another view of the term "useful arts".
25 See *In re Musgrave*, 167 USPQ (BNA) 280 (CCPA 1970). Hence, the first test of

whether an invention is eligible for a patent is to determine if the invention is within the "technological arts".

Further, despite the express language of §101, several judicially created exceptions have been established to exclude certain subject matter as being patentable subject matter covered by §101. These exceptions include "laws of nature", "natural phenomena", and "abstract ideas". See *Diamond v. Diehr*, 450, U.S. 175, 185, 209 USPQ (BNA) 1, 7 (1981). However, courts have found that even if an invention incorporates abstract ideas, such as mathematical algorithms, the invention may nevertheless be statutory subject matter if the invention as a whole produces a "useful, concrete and tangible result." See *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* 149 F.3d 1368, 1973, 47 USPQ2d (BNA) 1596 (Fed. Cir. 1998).

This "two prong" test was evident when the Court of Customs and Patent Appeals (CCPA) decided an appeal from the Board of Patent Appeals and Interferences (BPAI). See *In re Toma*, 197 USPQ (BNA) 852 (CCPA 1978). In *Toma*, the court held that the recited mathematical algorithm did not render the claim as a whole non-statutory using the Freeman-Walter-Abele test as applied to *Gottschalk v. Benson*, 409 U.S. 63, 175 USPQ (BNA) 673 (1972). Additionally, the court decided separately on the issue of the "technological arts". The court developed a "technological arts" analysis:

The "technological" or "useful" arts inquiry must focus on whether the claimed subject matter...is statutory, not on whether the product of the claimed subject matter...is statutory, not on whether the prior art which the claimed subject matter purports to replace...is statutory, and not on whether the claimed subject matter is presently perceived to be an improvement over the prior art, e.g., whether it "enhances" the operation of a machine. *In re Toma* at 857.

In *Toma*, the claimed invention was a computer program for translating a source human language (e.g., Russian) into a target human language (e.g., English). The court found that the claimed computer implemented process was within the "technological art" because the claimed invention was an operation being performed by a computer within a computer.

The decision in *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* never addressed this prong of the test. In *State Street Bank & Trust Co.*, the court found that the "mathematical exception" using the Freeman-Walter-Abele test has little, if any, application to determining the presence of statutory subject matter but rather, statutory subject matter should be based on whether the operation produces a "useful, concrete and tangible result". See *State Street Bank & Trust Co.* at 1374. Furthermore, the court found that there was no "business method exception" since the court decisions that purported to create such exceptions were based on novelty or lack of enablement issues and not on statutory grounds. Therefore, the court held that "[w]hether the patent's claims are too broad to be patentable is not to be judged under §101, but rather under §§102, 103 and 112." See *State Street Bank & Trust Co.* at 1377. Both of these analysis goes towards whether the claimed invention is non-statutory because of the presence of an abstract idea. Indeed, *State Street* abolished the Freeman-Walter-Abele test used in *Toma*. However, *State Street* never addressed the second part of the analysis, i.e., the "technological arts" test established in *Toma* because the invention in *State Street* (i.e., a computerized system for determining the year-end income, expense, and capital gain or loss for the portfolio) was already determined to be within

the technological arts under the *Toma* test. This dichotomy has been recently acknowledged by the Board of Patent Appeals and Interferences (BPAI) in affirming a §101 rejection finding the claimed invention to be non-statutory. See *Ex parte Bowman*, 61 USPQ2d (BNA) 1669 (BdPatApp&Int 2001).

5

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

10 (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15 **Claims 1-62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zervides et al (US6052674) in view of Zervides et al (2004/0064371).**

Regarding claims 1-4, 57, 59, Zervides et al teaches systems and methods for encouraging customers of suppliers to pay their bills on time [abstract]. A central host (EICS) tracks customer invoice payment history and stores user history data in
20 customer accounts in the EICS database [fig 11, element 138]. Although Zervides et al charges late paying customers extra fees as is generally well known [6:12-30], Zervides et al does not reward timely paying customers with tangible benefits other than their credit history is not damaged and they avoid the extra fees. Applicant however points out how several incentive systems are known which reward timely bill payers.
25 This admitted prior art includes providing discounts as well as the earning of (presumably physical) travel vouchers for timely payments [pg 2]. Crapo teaches a

centralized system which enables user to earn electronic travel credits (webmiles – generic frequent flyer miles) as incentives for performing acts for various partners.

These travel credits can be collected by users and redeemed for discounted travel products/services [abstract, ¶ 35]. It would have been obvious to one of ordinary skill at

5 the time of the invention to have provided travel credits as further incentives for the bill payers of Zervides et al in an electronic manner as taught by Crapo. Zervides et al teaches that users and their invoices are identified to the central system by the billing sponsor/supplier; late bill payers are charged fees as a percentage of the amounts owed [7:51-62]. It would have been obvious to one of ordinary skill at the time of the
10 invention to have provided travel credits as incentives for timely payers in the same manner – a percentage of the amount due.

Regarding claims 5, the supplier/sponsor informs the host of the user's payment information [fig 9].

Regarding claims 7-9, Crapo teaches that the travel credits are accumulated in
15 the centralized user account and are redeemed by a travel agency for travel goods/services [¶ 33, 37].

Regarding claims 10, identifying the amount due on the bill is taken to provide identifying the amount of accounts receivables qualified to receive a credit.

Regarding claims 11, 12, the travel agency system of Crapo is in electronic
20 communication with the crediting host and is therefore taken to be "combined" into a single incentive system. Zervides et al and Crapo teach that the elements of the system can be connected and accessed via the Internet [Zervides et al col 10, Crapo fig 3].

Regarding claim 13, Crapo teaches that the user can access his account status via a web site [¶ 40].

Regarding claims 14, 15, 56, Zervides et al does not restrict the suppliers/sponsors to any particular industry or occupation, but does mention small and medium sized businesses as well as health care businesses including doctors [1:25-47]. Crapo teaches that the suppliers/sponsors could be any type of business, especially ones that engage in e-commerce [¶ 35]. It would have been obvious to one of ordinary skill at the time of the invention to have partnered with any business that sells goods or services.

Regarding claims 16, 17, 19-23, Crapo teaches that users having enough credits and desiring to redeem them can engage in a redemption process with a redemption center (a travel agency/service). [¶ 40].

Regarding claim 18, Zervides et al teaches that the sponsors forward billing information to the host for each billing cycle [fig 9].

Regarding claims 24, 25, Zervides et al teaches that invoice and customer data is sent from supplier/sponsor to central system via the Internet [10:12-26]. This is taken to provide electronic file transfer of such data.

Regarding claims 26-36, 38, 41, 43, 45, 46, 58, Zervides et al teaches the sponsor 102, administering 100 and customer 104 systems [fig 1]. Crapo teaches a similar architecture including the 3rd party vendor redemption center 210 [fig 2a]. Each sponsor system includes what is taken to be an Internet-compatible personal computer. Regarding claim 29, the Adminstrating system can be fairly describes as an application

service provider connected via a network, as shown. Regarding claim 30, Zervides et al teaches that the central host can communicate with the user system (a PC) via email [10:16-27].

Regarding claims 37, Zervides et al teaches that the payments between entities
5 can be made by a financial network run by the EICS or by a bank. Payments can be made via transfer of funds between bank accounts, electronic transfer, check, cash or any other payment means available [7:63-67, 8:1-8]. It would have been obvious to one of ordinary skill at the time of the invention to have also provided funds transfer via credit card payments as is well known.

10 Regarding claims 39, 40, the combination proposed by the examiner locates the user credit database on the same central host as the credit awarding functionality. However Official Notice is taken that it is well known to decentralize various databases and subsystems for modularity and it would have been obvious to one of ordinary skill at the time of the invention to have done so with the user accounts and the credit
15 determining subsystems. Further, applicant's claiming of these items being together and then apart suggests a lack of criticality.

Regarding claims 42, Official Notice is taken that it is well known to provide advertising to prospects about business partners and the products and services they make available. It would have been obvious to one of ordinary skill at the time of the
20 invention to have advertised the existence of such an incentive invoicing system and the products/services offered by its members in order to attract more customers.

Regarding claim 44, Crapo's goal is to provide a travel incentive system more flexible than traditional systems. Crapo provides "at least one travel agent or large travel service [¶ 37] and allows users to redeem credits for different airlines as well as different carriers for trains, buses, cruises, hotels, cars, etc [¶ 38]; the customer is given wide
5 flexibility in selections for redemptions.

Regarding claim 47-49, 60-62, Crapo teaches that travel incentive systems are known to purchase the credits from the airlines. It would have been obvious to one of ordinary skill at the time of the invention for the EICS system to purchase the redeemable credits in order to fund the incentives. As stated above, Zervides et al
10 teaches that the payments between entities can be made by a financial network run by the EICS or by a bank. Payments can be made via transfer of funds between bank accounts, electronic transfer, check, cash or any other payment means available [7:63-67, 8:1-8]. It would have been obvious to one of ordinary skill at the time of the invention to have also provided funds transfer via credit card payments as is well
15 known.

Regarding claim 50-54, Crapo teaches that users can check account status via a web site interface [¶ 40]. Zervides et al teaches that status messages can be delivered between entities via email [10:12-43]. It would have been obvious to one of ordinary skill at the time of the invention to have notified the user of earned credit(s) via such
20 email messages.

Regarding claim 55, Official Notice is taken that it is well known to provide advertising in emails sent to customers. It would have been obvious to one of ordinary

Art Unit: 3622

skill at the time of the invention to have included ads regarding the sponsors products in such emails, inc order to further increase sales.

Conclusion

5 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey D. Carlson whose telephone number is 571-272-6716. The examiner can normally be reached on Mon-Fri 8:30-6p, (off on alternate Fridays).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eric Stamber can be reached on (571)272-6724. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jeffrey D. Carlson
Primary Examiner
Art Unit 3622

20

jdc